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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,467	06/23/2003	Venkat Selvamanickam	SPP 18.806	2664

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EXAMINER	
TALBOT, BRIAN K	
ART UNIT	**PAPER NUMBER**
1762	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,467	SELVAMANICKAM ET AL.	
	Examiner	Art Unit	
	Brian K Talbot	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/8/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-9 remain in the application.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

No apparatus claims are present in the application. Only method claims.

In addition, Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-18,23, of copending Application No. 10/609,065. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions claim the process steps to form a buffer layer on a continuous substrate. The method of continuously coating a substrate with a buffer layer as a support for a ceramic superconducting material comprising providing a feed spool of substrate; threading the substrate into a vacuum deposition chamber; loading at least one coating material that is to be coated onto the surface into the vacuum deposition chamber; reducing the pressure in the deposition chamber to no greater than about $1x10^{-5}$, injecting oxygen into the deposition chamber; initializing an energy source located in the deposition chamber to a predetermined level and trajectory; vaporizing the coating material by bombarding the coating material with produced by the energy source; feeding the substrate through a deposition zone in the vacuum chamber; allowing the coating vaporized material to impinge upon the surface of the substrate in the deposition zone; and collecting the coated substrate on a take up spool.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7-9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iijima et al. (5,650,378) or Iijima et al. (6,214,772).

Iijima et al. (5,650,378) teaches a method of making polycrystalline thin film and superconducting oxide body. Coating superconductive materials by sputtering while irradiating the substare base with ion beams at an oblique angle to the base. The oblique angle being 40-60 degrees (abstract). Iijima et al. (5,650,378) depicts an apparatus in Fig. 7 which details a take-up and wind-up roll (1) where upon a superconductive coating is applied to the substrate on the take-up and wind-up rolls. Figs. 3 and 8 further depict an ion beam generator (13) utilized to modify the coating applied (col. 6, line 60 – col. 8, line 55 and col. 9, line 50 – col. 10, line 30). The substarte can be a variety of materials (col. 2, lines 55-60). The ions are supplied by high frequency in which RF is included.

Iijima et al. (6,214,772) teaches a process of preparing polycrystalline thin film and apparatus therefrom. The superconductive film is applied by depositing coating material while contacting the substrate with ion beam bombardment at an angle of 50-60 degrees (abstract). Apparatus in depicted in Fig. 3, which shows a take-up roll (24) and a wind-up roll (25) to

supply the substrate to the coating area for deposition. Argon is utilized to sputter the coating material from target (36) and onto the substrate (A). Ions are supplied from (39) at an angle of 50-60 degrees preferably 55 degrees. Cryo-pump (52) is utilized to maintain the proper pressure for deposition. The ions are supplied by high frequency in which RF is included.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima et al. (5,650,378) or Iijima et al. (6,214,772) in combination with Fritzemeier et al. (6,797,313).

Iijima et al. (5,650,378) or Iijima et al. (6,214,772) fail to teach the take-up and wind-up rolls being outside the coating chamber.

Fritzemeier et al. (6,797,313) depicts a superconducting coating applied to a tape substrate whereby take-up roll (130) and wind-up roll (140) are located outside the coating chamber.

Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Iijima et al. (5,650,378) or Iijima et al. (6,214,772) process by locating the take-up and wind-up rolls outside the deposition chamber as evidenced by Fritzemeier et al. (6,797,313) with the expectation of achieving similar results.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima et al. (5,650,378) or Iijima et al. (6,214,772).

Iijima et al. (5,650,378) or Iijima et al. (6,214,772) fail to teach a Kapton substrate and coating more than one substrate simultaneously.

While the Examiner acknowledges this fact, it is the Examiner's position that the type of substrate would be a matter of design choice and would be dependent upon the desired final product. In addition, the references teach a wide variety of substrates and hence, one skilled in the art would have had a reasonable expectation of achieving similar success regardless of the type of substrate utilized. With respect to coating more than one substrate simultaneously, it has been well settled that the mere duplication of parts has been held to be obvious *In Re Harza 124 USPQ 378.*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B K Talbot 2/7/05

Brian K Talbot
Primary Examiner
Art Unit 1762

BKT